

Remarks

Prior to this amendment, claims 1-4, 6-13, 16, 17, 20-28 were pending. Claim 1 is amended herein. Support for the amendment of claim 1 can be found in the specification at least at page 51, lines 24-34.

No new matter is added by this amendment. Unless specifically stated otherwise, this amendment is not intended to limit the scope of any claim. This amendment is appropriate after final because it implements the suggestions of the Examiner and will not require further search or examination. After entry of this amendment, **claims 1-4, 6-13, 16, 17, 20-28 are pending in this application.**

Examiner Interview

Applicants thank Examiners Bertoglio and Shen for the courtesy of the May 30, 2007, telephone interview with their representative Dr. Anne Carlson. During the interview, the rejection of the claims under 35 U.S.C. §102(e) was discussed. Although final agreement was not reached on all issues, it is believed that this response incorporates the suggestions of the Examiners.

Election/Restriction and Pending Claims

The Office action states that claims 2 and 5-21 are withdrawn from consideration. Applicants respectfully submit that claims 2, 6-13, 16, 17, and 20 should be examined with the claims of elected Group II as requested in the Amendment and Response submitted on December 4, 2006. Applicants remind the Examiner that in the response to the Restriction Requirement dated April 3, 2006, Examiner's Group II (claims 1, 3, 4, 22, and 23) was elected. In the Amendment and Response submitted on December 4, 2006, Applicants amended withdrawn claims 2, 6-13, 16, 17, and 20 to depend, either directly or indirectly, from claim 1. As such, claims 2, 6-13, 16, 17, and 20 are currently directed to the method of elected Group II and include all of the limitations thereof. Thus, Applicants respectfully request that these claims be joined with Group II and examined with the originally elected claims.

In addition, Applicants note that new claims 24-28, added in the Amendment and Response of December 4, 2006, were not considered in the March 22, 2007 final Office action. As claims 24-28 are directed to the method of claim 1, and include all the limitations thereof, Applicants respectfully request that these claims be examined as part of Examiner's Group II.

Finally, claims 5, 14, 15, 18, and 19 were canceled in the Amendment and Response submitted on December 4, 2006. Applicants respectfully request that the Examiner acknowledge that claims 1-4, 6-13, 16, 17, 20-28 are pending in this case.

Information Disclosure Statement

Applicants thank the Examiner for considering and initialing the second reference on page 13 of the Information Disclosure Statement submitted on September 19, 2005.

Withdrawal of Claim Rejections

Applicants thank the Examiner for withdrawing the rejections of claims 1, 3, 4, 22, and 23 under 35 U.S.C. §112, first and second paragraphs.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 1, 3, 4, 22, and 23 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Conrad *et al.* (U.S. Patent Application Publication No: 2003/0082800 A1, Publication date, May 1, 2003), because Conrad *et al.* allegedly describes "an expression vector for altering expression of a target nucleic acid sequence in a host cell by production of single-stranded cDNA (ssDNA) in the host cell *in vivo*" (Office action at page 6). Applicants respectfully traverse this rejection.

As discussed in the Amendment and Response submitted on December 4, 2006, claim 1 is directed to a method of gene targeting that utilizes a nucleic acid sequence (gtmRNA) that is capable of **self-priming** reverse transcription. In contrast, Conrad *et al.* discloses a nucleic acid sequence that, when transcribed, serves as a template for tRNA-dependent reverse transcriptase-directed cDNA synthesis initiating from a tRNA primer binding site (PBS) (Conrad *et al.*, paragraph [0062]). Conrad *et al.* does not teach a *nucleic acid sequence* that *self primes* reverse transcription. Nor does Conrad

et al. teach a *method* of modifying a target nucleic acid of interest at a target locus using a *self-priming* mechanism to recruit RT and initiate reverse transcription. As Conrad *et al.* does not teach or suggest self-priming of reverse transcription, and as the disclosed mRNA substrate is required to be tRNA-dependent for reverse transcription (Conrad *et al.*, paragraph [0062]), Conrad *et al.* does not and cannot anticipate claims 1, 3, 4, 22, and 23.

The Examiners agreed during the telephone interview that Conrad *et al.* does not teach self-priming reverse transcription. However, solely in the interest of advancing prosecution, Applicants have amended claim 1 to recite “the message RNA self-primers reverse transcription by a reverse transcriptase.” Thus, claim 1 and claims 3, 4, 22, and 23, which depend, either directly or indirectly, from claim 1 and therefore incorporate all of the limitations thereof, are clearly distinguishable from Conrad *et al.* Applicants respectfully request that the rejection of claims 1, 3, 4, 22, and 23 be withdrawn as these claims are novel and not anticipated by Conrad *et al.*

The June 5, 2007 Interview Summary alleges that “[t]he claims of instant application encompass some naturally occurring mRNA, including Tf1 recited in Final office action, which can utilize self-priming mechanism for reverse transcriptase for cDNA synthesis” and “it’s not clear in the literatures whether the two mechanisms are mutually exclusive for a given mRNA molecule.” Applicants remind the Examiner that the rejection of claims 1, 3, 4, 22, and 23 under 35 U.S.C. §102(e) is based specifically on Conrad *et al.* and not on literature which is not cited against the claims. As discussed above, Conrad *et al.* does not disclose self-priming reverse transcription. Thus, Conrad *et al.* does not and cannot anticipate claims 1, 3, 4, 22, and 23. Levin is not cited against the claims.

Applicants assert that the foregoing arguments rebut the 35 U.S.C. §102(e) rejection maintained in the present Office action. Applicants respectfully request that the rejection of claims 1, 3, 4, 22, and 23 be withdrawn.

Conclusions

Based on the foregoing amendments and arguments, the claims are in condition for allowance and notification to this effect is requested. If for any reason the Examiner believes that a telephone conference would expedite allowance of the claims, please telephone the undersigned at (503) 595-5300.

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